

REMARKS

This paper is in response to the final Office Action dated August 11, 2006, and to the Advisory Action dated January 8, 2007, for the above-captioned U.S. Patent Application.

The final Office Action rejected all pending claims 1-15 under 35 USC 103(a) as being unpatentable over Lin (US 5831976) in view of Elliott (US 6438376) and Jensen (US 6405043).

Each of independent claims 1, 8, and 15 are amended to incorporate the features of the dependent claims 3 and 10, and further to recite that the owned/avoided/shared allocations are slots rather than channels as in now-canceled claims 3 and 10. claims 3 and 10 are canceled, and dependent claims 2, 5, 6, 9, 12, 13, and 14 are amended for consistency with the amended independent claims from which they depend. Support for these claim amendments are found at least on page 8, lines 4-9.

Claim 1 recites in relevant part:

... and **assigning as shared by said each base station and said other base station slots in which said other base stations interfere with said each base station if used simultaneously** with said each base station and which are not assigned as owned by either;

Lin discloses "time sharing is accomplished by partitioning each radio channel into a plurality of "virtual" channels, each virtual channel having assigned thereto a plurality of the cells 302 selected such that the cells 302 can carry simultaneous transmissions on a single radio channel without causing excessive interference with one another," further in Lin, "a virtual channel is activated for the duration of one or more of the time slots, or frames, of the transmission protocol used in the communication system, and only one virtual channel is allowed to be active during any given time slot on any given radio channel," (col. 6, lines 4-14). Lin does not assign any slot as shared. In the passage quoted above, virtual channels are assigned so as to avoid excessive interference. This implies some physical separation (time, frequency, etc). The final rejection of claims 3 and 10 characterized the slots of the same channel allocated to different users as a shared channel. No reference discloses a shared slot. Lin teaches away from a shared slot

because as quoted above, Lin seeks to avoid excessive interference among users by assigning to each of them separate virtual channels.

Elliot discloses that “When a channel listed for a quadrant in the matrix 240 is unavailable, the variable “next” points to the next best channel for that quadrant, as determined by the quality index,” (col. 13, lines 9-11). However, claim 1 recites: “assigning as shared by said each base station and said other base station slots in which said other base stations interfere with said each base station if used simultaneously with said each base station and which are not assigned as owned by either,”. Elliot discloses a method to “track the quality index and power level average for each of channels 1 through “n,” (col. 12, lines 56-58). Therefore, although the applicant does not agree that Elliot and Lin can be combined, even if the combination were viable in the manner suggested, the result would simply be a means to track the quality index of a channel, and the method to partition a radio channel into “virtual channels.” Furthermore, if the result as stated by the examiner would be “allocating on request a channel according to said predetermination and a desired quality class of transmission in order to enhance wireless system management of channel assignment,” the combination would not disclose or suggest “assigning as shared by said each base station and said other base station slots in which said other base stations interfere with said each base station,” as in claim 1. This is at least because 1) each of Lin and Elliot disclose allocating different channels to different users, regardless of whether they term the allocated entity a channel, a slot, or a virtual channel; 2) neither reference allocates a channel slot for different entities to share; and 3) the management of channel assignment asserted by the Examiner as motivation tends to avoid allocating a shared slot to two different entities. Such would allow those two entities to interfere, leading to the allocated slot being wasted as neither transmission would get through. Neither reference discloses, teaches or suggests how such interference might be avoided, except by allocating different resources to different entities.


In addition, the Examiner concedes that the combination of Lin and Elliott fails to disclose predetermining, for each base station, a classification according to a probability of interference at the channel with other base stations of the plurality of base stations upon a request of at least one mobile station to initiate communication via a base station. As a result, the Examiner relied on Jensen to address the failure of Lin and Elliott to disclose this element.

Jensen discloses a method for "utilizing signal level data for an entire system to provide predictive plots which may be utilized to establish cell site positions and channel assignments" (col. 7, line 63 thru col. 8, line 1). Jensen merely "allows an interference value to be determined which essentially indicates the percentage of time a subscriber to a mobile system may expect to encounter perceptible interference at any point in the system," and further, "This (interference value) allows an operator to pinpoint sectors and cells which need to be improved and provides an overall evaluation of a system from which an operator may determine rationally whether improvements need to be made," (col. 11, lines 25-29; and lines 32-36). As stated above, the proposed combination of Lin and Elliot fails to disclose or suggest "assigning as shared by said each base station and said other base station slots in which said other base stations interfere with said each base station," as recited in claim 1. Therefore, the addition of Jensen's "predictive plots which may be utilized to establish cell site positions and channel assignments," fails to cure the above shortfall of Lin and Elliot vis a vis claim 1.

Independent claims 8 and 15 are amended similarly, and are seen to distinguish over any combination of Lin, Elliot and Jensen for the reasons detailed above.

The Examiner is respectfully requested to reconsider the previous rejections in view of the claims as amended herein, and to issue a timely notice of allowance respecting claims 1, 2, 4-9, and 11-15. The undersigned representative welcomes the opportunity to resolve any matters that may remain via teleconference, as the Examiner deems appropriate.

Respectfully submitted:


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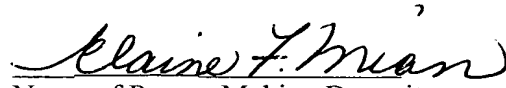
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